

Conference Schedule

Monday 9th of May

13.00 - 13.20	Welcome and opening remarks by Susanne Sørensen, Dean of the Department of Science and Environment, Roskilde University
13.20 - 14.00	Keynote <u>Helen Byrne</u> , University of Oxford <i>Understanding form and function in vascular tumours</i>
14.00 - 14.20	Uffe Høgsbro Thygesen, Technical University of Denmark <i>Mean field games in marine ecology</i>
14.20 - 14.40	Anna Suomenrinne-Nordvik, Finnish Institute for Health and Welfare <i>Adapting a model for Covid-19 to a changing reality</i>
14.40 - 15.10	<i>Break</i>
15.10 - 15.30	Helena Herand, Technical University of Denmark <i>Algorithm-based developments for the curation and expansion of genome-scale metabolic models</i>
15.30 - 15.50	Pedro Rosero, Lund University <i>Effects of landscape heterogeneity modification and natural enemy dispersal on biological control</i>
15.50 - 16.10	Johnny T. Ottesen, Roskilde University <i>Mathematical modeling of the cancer-infection-immune system explains age dependent cancer development and sensitivity to infection.</i>
16.10 - 16.40	<i>Break</i>
16.40 - 17.20	Keynote <u>Leif Rune Hellevik</u> , Norwegian University of Science and Technology <i>Perspectives on uncertainty quantification and sensitivity analysis for cardiovascular modeling</i>
17.20 - 17.40	Christian Berrig, Roskilde University <i>Epidemiological aspects of infectious disease evolution</i>
17.40 - 18.00	Torbjörn Lundh, University of Gothenburg <i>Data augmentation with Möbius transformations</i>
18.00 - 19.00	<u>Poster session</u>
19.00 - 22.00	<i>Conference dinner</i>

Tuesday 10th of May

- 09.00 - 09.20 Mads Peter Sørensen, Technical University of Denmark
Modelling growth patterns of bacterial biofilms in a centrifugal Lab-on-a-disc platform
- 09.20 - 09.40 Åke Brännström, Umeå University
Resource competition and conditions for species richness
- 09.40 - 10.00 Rasmus Kristoffer Pedersen, Roskilde University
Mathematical Modelling of Myeloproliferative Neoplasms and Hematopoietic Stem Cells
- 10.00 - 10.20 Henrik Sjödin, Umeå University
Understanding emerging infectious diseases by mathematical analysis
- 10.20 - 10.50 *Break*
- 10.50 - 11.10 Alessandra Lucchetti, University of Copenhagen
p53 oscillatory dynamics optimizes DNA repair efficiency by regulating foci formation
- 11.10 - 11.30 Yun-Ting Jang, Lund University
The interaction of ecological opportunity and predation in prey-predator radiation cascades
- 11.30 - 11.50 Kalle Parvinen, University of Turku
Evolution of dispersal under spatiotemporal heterogeneity
- 11.50 - 12.10 Torsten Lindström, Linnaeus University
On the stochastic engine of transmittable diseases in exponentially growing populations
- 12.10 - 12.30 Cecilia Lövkvist, University of Copenhagen
Mathematical modelling of Polycomb mediated epigenetic memory
- 12.30 - 13.30 *Break*
- 13.30 - 14.10 **Keynote**
Mats Gyllenberg, University of Helsinki
Difference and differential equations in population biology: History and modelling
- 14.10 - 14.30 Carsten Wiuf, University of Copenhagen
Stationary distributions of systems with Discreteness Induced Transitions
- 14.30 - 14.50 Peter Røgen, Technical University of Denmark
Geometric and (Bio-) Topological aspects of Protein 3d-Structures Comparison – navigating the configuration space of long self-avoiding chains in 3d
- 14.50 - 15.10 Moein Khalighi, University of Turku
Quantifying the impact of ecological memory on the dynamics of interacting communities
- 15.10 - 15.30 *Break*
- 15.40 - 16.00 Thomas Stiehl, Roskilde University
Modeling clonal evolution of blood cancers
- 16.00 - 16.20 Willian T. A. F. Silva, Lund University
Phenological evolution in annual plants under light competition as a consequence of abiotic and biotic effects of climate change
- 16.20 - 16.40 Igor Marín De Mas, Technical University of Denmark
Unveiling in vivo metabolic dysfunctions associated to Endotheliopathy of Trauma via model-driven and machine learning methods
- 16.40 - 17.00 Bernhelm Booss-Bavnbek, Roskilde University
The role of science in the management of society. Covid-19 revisited

Meals and refreshments are provided.

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